

## **Remarks**

### **1. Summary of the Office Action**

In the Office Action mailed April 11, 2008, the Examiner objected to the drawings and indicated that figure 1 should be designated with a legend such as “prior art.” The Examiner also objected to the drawings and indicated that circuit blocks in figure 7 were not properly labeled. The Examiner also objected to the drawings and alleged that the drawings did not show every feature of the invention.

The Examiner indicated that a new abstract conforming to the proper format and language guidelines should be submitted. The Examiner also indicated that the specification did not conform to the formatting requirements of the United States Patent system.

The Examiner rejected claims 14-29 under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite. The Examiner also rejected claims 14-29 under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the written description requirement. The Examiner also rejected claims 14 and 18 under 35 U.S.C. § 102 as being allegedly anticipated by the article entitled “Sub-Micrometer Ferromagnetic NOT Gate and Shift Register” (Gang Xiong).

### **2. Status of the Specification**

Applicant has prepared a substitute specification for the pending application. Pursuant to MPEP § 608.01, a copy of the substitute specification with markings showing changes relative to the prior version of the specification is included in this response. In addition, pursuant to MPEP § 608.01(c) a version of the substitute specification without markings is also included. The substitute specification included with this response also includes a new abstract. Applicant submits that no new matter has been included in the substitute specification.

**3. Status of the Drawings**

Applicant has prepared replacement figures for each of figures 1-8.

**4. Status of the Claims**

Applicant has amended claims 14-29. Currently pending are claims 14-29, of which claim 14 is independent, and claims 15-29 are dependent.

**5. Request for Recognition of Correct Foreign Priority**

On June 7, 2007, Applicant submitted a Request for Recapture of Application Data Sheet, noting that the Application Data Sheet originally filed with the pending application contained an error in the Foreign Priority Information field. A Supplemental Application Data Sheet reflecting the proper foreign priority information was included with Applicant's June 7, 2007 letter. As indicated in the letter, a Claim of Priority to application number GB 0207160.3, along with a certified copy of the application, was mailed to the United States Patent and Trademark Office on January 19, 2005. However, the foreign priority information listed in PAIR for the pending application continues to reflect the erroneous priority document number. Consequently, Applicant respectfully requests that the Examiner recognize the corrected foreign priority claim, and update the records associated with the pending application accordingly.

**6. Response to Objections**

As noted above, Applicant has amended the abstract, specification, and figures. Applicant respectfully submits that the amended abstract conforms to the language and

formatting requirements described by the Examiner. With regards to the specification, Applicant respectfully submits that the substitute specification conforms to the required format. With regards to the drawings, Applicant has submitted replacement figures for each of figures 1-8. Applicant has amended figure 1 to include an indication that it represents a prior art structure. All figures have been amended to properly label each relevant aspect of the figure, as referenced in the substitute specification. Further, Applicant respectfully submits that the figures show every feature of the invention specified in the claims, such that a person of ordinary skill in the art would recognize the claimed features. Consequently, Applicant respectfully requests that the Examiner withdraw all objections to the pending application

#### **7. Response to Rejections**

The Examiner rejected claims 14-29 under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite. In rejecting the claims, the Examiner indicated that the phrases “the initial path” and “the deviating portion” in independent claim 14 lacked clear antecedent basis. The Examiner also indicated that the term “suitable applied field,” as set forth in independent claim 14 was also unclear. The Examiner did not identify any indefiniteness in dependent claims 15-29 beyond the alleged indefiniteness incorporated through the dependency of claims 15-29 from claim 14.

Applicant has amended claim 14 to provide clear antecedent basis for the phrases “initial path” and “deviating portion.” Applicant has also removed the term “suitable” from the phrase “suitable applied field.” Consequently, Applicant respectfully submits that independent claim 14 is not indefinite. Further, since claim 14 is not indefinite, claims 15-29 do not incorporate any indefiniteness from independent claim 14. Thus, Applicant respectfully submits that claims 15-

29 are not indefinite. Consequently, Applicant respectfully requests that the Examiner withdraw the rejections of claims 14-29 under 35 U.S.C. § 112, second paragraph.

In rejecting claims 14-29 under 35 U.S.C. § 112, first paragraph, the Examiner indicated that the disclosure allegedly failed to specify a data storage device because the disclosure allegedly failed to provide details pertaining to a data writer, a data storage medium, a reader, and how data is stored in the medium.

As noted above, Applicant has submitted a substitute specification and replacement figures with this response, and while the substitute specification contains no new matter, Applicant respectfully submits that the substitute specification includes sufficient detail to enable a person of ordinary skill in the art to make and practice the claimed data storage devices. While Applicant respectfully submits that the specification should be considered as a whole, Applicant submits that the figures, along with their accompanying explanations in the specification, provide sufficient detail regarding the structure, operation, and other aspects of example embodiments of the claimed data storage devices. Consequently, Applicant respectfully submits that each of claims 14-29 comply with the written description requirement, and respectfully requests that the Examiner withdraw all rejections of claims 14-29 under 35 U.S.C. § 112, first paragraph.

In rejecting claims 14 and 18 under 35 U.S.C. § 102, the Examiner relied on Gang Xiong, which is dated as June 14, 2002. As noted above, Applicant respectfully requests that the Examiner note the correct foreign priority document as GB 0207160.3, which entitles the pending application to a priority date of March 27, 2002. Applicant notes that the pending application, when granted the proper foreign priority, predates Gang Xiong. Consequently, Applicant respectfully submits that Gang Xiong does not anticipate claims 14 and 18, and

Applicant respectfully requests that the Examiner withdraw all rejections of claims 14 and 18 under 35 U.S.C. § 102.

**Conclusion**

Applicant respectfully submits that, in view of the remarks above, all of the pending objections have been addressed and all of the pending rejections have been overcome. Applicant therefore respectfully requests allowance of all the pending claims. The Examiner is invited to call the undersigned at (312) 913-0001 with any questions or comments.

Respectfully submitted,

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